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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,130	07/10/2001	Kazuya Iwamoto	L7016.01122	5796

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EXAMINER

CREPEAU, JONATHAN

ART UNIT

PAPER NUMBER

1746

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/901,130

Applicant(s)

IWAMOTO ET AL.

Examiner

Jonathan S. Crepeau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2004.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-24 and 26-28 is/are allowed.
- 6) ☒ Claim(s) 25, 29 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office action is responsive to the supplemental amendment filed on July 22, 2004 and addresses claims 1-27 and newly added claims 28-30. Claims 1-24 and 26-28 are allowed. Claims 29 and 30 are newly rejected under 35 USC §112, first paragraph as necessitated by amendment. Claim 25 is newly rejected under 35 USC §103, however, this rejection was not necessitated by amendment. As such, this action is non-final.

Claim Suggestions

2. In claim 7, the added limitation "further comprising an electrolyte" is redundant because an electrolyte has previously been defined in parent claim 5. Claim 29 recites "in which -X- is -CONH- or -SO₂NR- (R is an alkyl group of 1-8 carbon atoms).....and -X- is -CONH-". It is submitted that the first part of this recitation is also unnecessary. Appropriate correction is suggested but not required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 29 and 30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 29 recites that a surface tension of the electrolyte (γ_1) is more than a surface free energy of the electrode (γ_{se}). It is submitted that this language is broader than what is contemplated as the invention in the application as originally filed. On page 47, the specification states that the difference between γ_1 and γ_{se} should not be more than 10 dynes/cm. Thus, a situation where the γ_1 is larger than γ_{se} by more than 10 dynes/cm, which is encompassed by claim 29, does not appear to be part of the invention. As such, it is believed that claim 29 introduces new matter into the application.

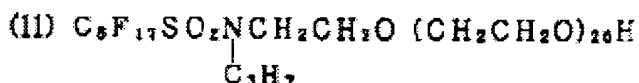
Claim 30 recites that the surface active agent comprises a -CONH- group. However, it is submitted that this recitation also comprises new matter because the -CONH- group is only disclosed by the instant specification as being part of a specific oligomer or polymer. Claim 30 encompasses compounds which do not have to be polymeric in nature. As such, claim 30 also introduces new matter into the application.

Claim Rejections - 35 USC § 103

5. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 7-153467.

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The reference discloses a nonaqueous electrochemical apparatus comprising a surfactant in the electrode composition (see abstract). The surfactant may have the following composition (see paragraph 21 of the machine translation):



Thus, regarding claim 26, the -Y group would be an H atom. However, the reference does not expressly teach that the -Y group in formula (11) is -PO₃W₂, -SO₃W or -CH₃.

However, the reference does teach various terminal groups at the top of page 4, including PO-(OM₂), -SO₃M, and -O-(AO)_nR, where R can be an H atom or methyl group (see par. [0010] of the translation). It is submitted that since the reference identifies the various terminal groups as functionally equivalent to each other, it would be obvious to substitute one terminal group for another. An express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. *In re Fout*, 675 F.2d 297, 213 USPQ 532 (CCPA 1982); MPEP §2144.06. Attention is also directed to formulas (3), (4), and (6) of the reference which contain the instantly claimed end groups and differ only from the claimed formula by one or more -CH₂- groups. The addition or subtraction of such groups is also not considered to distinguish the claimed formula over the reference.

Allowable Subject Matter

6. Claims 1-24 and 26-28 are allowed.

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7. Claims 29 and 30 contain allowable subject matter as currently drafted but are rejected under 35 USC §112 first paragraph.

8. The following is a statement of reasons for the indication of allowable subject matter:

The reasons for allowance of claims 1, 2, 3, 5, 26, and 27 were given in the previous Office action and remain applicable herein. Additionally, claim 28 is allowable and claims 29 and 30 contain allowable subject matter for these reasons.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (571) 272-1299. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached at (571) 272-1414. The phone number for the organization where this application or proceeding is assigned is (571) 272-1700. Documents may be faxed to the central fax server at (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jonathan Crepeau
Primary Examiner
Art Unit 1746
September 20, 2004